

State of Utah

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Title V Operating Permit

PERMIT NUMBER: 900001001

DATE OF PERMIT: November 20, 1998

Date of Last Revision: March 26, 2002

This Operating Permit is issued to, and applies to the following:

Name of Permittee:

Questar Pipeline Company
180 East 100 South
PO Box 11450
Salt Lake City, UT 84147-0450

Permitted Location:

Kastler/Marushack Compressor Station
Section 16, T3N, R24E
N4539184 E 650257
Daggett County, UT 0

UTM coordinates: 4,539,634 meters Northing, 650,464 meters Easting
SIC code: 4922

ABSTRACT

The Kastler Compressor Station compresses natural gas for injection and delivery into a natural gas reservoir. Six reciprocating internal combustion engines and three gas turbines are used to drive nine compressors in the station. Natural gas is the fuel source for the engines and turbines. The station also includes the Clay Basin Dew Point (CBDP) Process Unit. The CBDP process unit receives and processes natural gas from a storage reservoir and from the main lines. The CBDP process unit includes an ethylene glycol regenerator, liquid hydrocarbon loading rack, and miscellaneous process stream equipment. The compressor gas turbines are subject to 40 CFR Part 60 Subpart GG. The CBDP process unit is subject to 40 CFR 60 Subpart KKK. Three storage tanks are subject to 40 CFR 60 Subpart Kb. Kastler Compressor Station is a major source of NO_x, CO and VOC.

UTAH AIR QUALITY BOARD

By:

Prepared By:

Richard W. Sprott, Executive Secretary

Dave Hansell

Operating Permit History

11/20/1998 - Permit issued	Action initiated by an initial operating permit application	
4/18/2001 -Permit modified	Action initiated by an administrative amendment (initiated by source)	Add the Clay Basin Dew Point Process Unit to further process the gas stream at the Kastler Compressor Station.
3/26/2002 -Permit modified	Action initiated by a significant operating permit modification	Add a compressor unit.

Table of Contents

SECTION I: GENERAL PROVISIONS.....	1
I.A. FEDERAL ENFORCEMENT	1
I.B. PERMITTED ACTIVITY(IES).	1
I.C. DUTY TO COMPLY.....	1
I.D. PERMIT EXPIRATION AND RENEWAL	2
I.E. APPLICATION SHIELD.	2
I.F. SEVERABILITY.	2
I.G. PERMIT FEE.....	2
I.H. NO PROPERTY RIGHTS.....	2
I.I. REVISION EXCEPTION.....	3
I.J. INSPECTION AND ENTRY.....	3
I.K. CERTIFICATION	3
I.L. COMPLIANCE CERTIFICATION	3
I.M. PERMIT SHIELD.....	4
I.N. EMERGENCY PROVISION.....	5
I.O. OPERATIONAL FLEXIBILITY.....	5
I.P. OFF-PERMIT CHANGES.	5
I.Q. ADMINISTRATIVE PERMIT AMENDMENTS.	5
I.R. PERMIT MODIFICATIONS.....	6
I.S. RECORDS AND REPORTING.	6
I.T. REOPENING FOR CAUSE.....	7
I.U. INVENTORY REQUIREMENTS.....	8
SECTION II: SPECIAL PROVISIONS.....	9
II.A. EMISSION UNIT(S) PERMITTED TO DISCHARGE AIR CONTAMINANTS.	9
II.B. REQUIREMENTS AND LIMITATIONS.	10
II.B.1 <u>Conditions on permitted source (Source-wide)</u>	10
II.B.2 <u>Conditions on Turbines for Gas Compression (ICE-1)</u>	11
II.B.3 <u>Conditions on Turbines for Backup Power (ICE-2)</u>	15
II.B.4 <u>Conditions on Internal Combustion Engine - Controlled (ICE-4)</u>	16
II.B.5 <u>Conditions on Underground Gasoline Storage Tank (TNK-2)</u>	20
II.B.6 <u>Conditions on Waste Water Tank (TNK-7)</u>	20
II.B.7 <u>Conditions on Waste Oil Tank 1 (TNK-8)</u>	21
II.B.8 <u>Conditions on Clay Basin Dew Point (CBDP) Process Unit (CBDP-0)</u>	21
II.C. EMISSIONS TRADING.	27
II.D. ALTERNATIVE OPERATING SCENARIOS.....	27
SECTION III: PERMIT SHIELD	27
SECTION IV: ACID RAIN PROVISIONS.....	27

Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

Section I: General Provisions

I.A. Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B. Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C. Duty to Comply.

I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))

I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))

I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))

I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay

any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D. Permit Expiration and Renewal.

I.D.1 This permit is issued for a fixed term of five years and expires on November 20, 2003. (R307-415-6a(2))

I.D.2 Application for renewal of this permit is due by May 20, 2003. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E. Application Shield.

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F. Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G. Permit Fee.

I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H. No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I. Revision Exception.

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J. Inspection and Entry.

I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))

I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))

I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))

I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K. Certification.

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

I.L. Compliance Certification.

I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than March 31, 1999 and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))

I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;

I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such

methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and
- I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.
- I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
EPA, Region VIII
999 18th Street, Suite 300
Denver, CO 80202-2466

I.M. Permit Shield.

- I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:
- I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))
- I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))
- I.M.2 Nothing in this permit shall alter or affect any of the following:
- I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))
- I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))
- I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N. Emergency Provision.

I.N.1 An “emergency” is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))

I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))

I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))

I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))

I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))

I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

I.O. Operational Flexibility.

Operational flexibility is governed by R307-415-7d(1).

I.P. Off-permit Changes.

Off-permit changes are governed by R307-415-7d(2).

I.Q. Administrative Permit Amendments.

Administrative permit amendments are governed by R307-415-7e.

I.R. **Permit Modifications.**

Permit modifications are governed by R307-415-7f.

I.S. **Records and Reporting.**

I.S.1 Records.

I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))

I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))

I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.

I.S.1.b.2 The date analyses were performed.

I.S.1.b.3 The company or entity that performed the analyses.

I.S.1.b.4 The analytical techniques or methods used.

I.S.1.b.5 The results of such analyses.

I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.

I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.

I.S.2 Reports.

I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))

I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))

I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 7 days.** Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

I.S.3 Notification Addresses.

I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Phone: 801-536-4000

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and
Environmental Justice (mail code 8ENF)
999 18th Street, Suite 300
Denver, CO 80202-2466

For reports, notifications, or other correspondence
related to permit modifications, applications, etc.

Environmental Protection Agency, Region VIII
Office of Partnerships & Regulatory Assistance
Air & Radiation Program (mail code 8P-AR)
999 18th Street, Suite 300
Denver, CO 80202-2466
Phone: 303-312-6440

I.T. **Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.U. **Inventory Requirements.**

I.U.1 An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

I.U.2 A Hazardous Air Pollutant Inventory shall be submitted in accordance with the procedures of R307-155, Hazardous Air Pollutant Inventory. (R307-155)

Section II: SPECIAL PROVISIONS

II.A. Emission Unit(s) Permitted to Discharge Air Contaminants.

(R307-415-4(3)(a) and R307-415-4(4))

- II.A.1 Turbines for Gas Compression** (designated as ICE-1)
Unit Description: Three pipeline quality natural gas-fired turbines rated at 5,152 Hp each. Turbines are used to compress gas and each turbine is equipped with low NO_x burners.
- II.A.2 Turbines for Backup Power** (designated as ICE-2)
Unit Description: Two pipeline quality natural gas-fired turbines rated at 800 kW each. Turbines used to generate backup power only.
- II.A.3 Internal Combustion Engines - Uncontrolled** (designated as ICE-3)
Unit Description: Five pipeline quality natural gas-fired reciprocating internal combustion engines (ICE) rated at 2,600 Hp each. These reciprocating ICEs are used to compress gas. No unit-specific applicable requirements.
- II.A.4 Internal Combustion Engine - Controlled** (designated as ICE-4)
Unit Description: One pipeline quality natural gas-fired reciprocating internal combustion engine (ICE) rated at 1,680 Hp. The engine is equipped with three-way non-selective catalytic reduction and is used to compress gas.
- II.A.5 Hot Water Boiler** (designated as EC-1)
Unit Description: One pipeline quality natural gas-fired hot water boiler rated at 3.4 MMBtu/hr. No unit-specific applicable requirements.
- II.A.6 Miscellaneous Heating Units** (designated as EC-2)
Unit Description: Five pipeline quality natural gas-fired heating units rated at 0.27, 0.56, 0.6, 1.0 and 3.3 MMBtu/hr. No unit-specific applicable requirements.
- II.A.7 Condensate Tanks** (designated as TNK-1)
Unit Description: Two 16,800 gallon, one 12,600 gallon, and two 1,000 gallon condensate tanks. No unit-specific applicable requirements.
- II.A.8 Underground Gasoline Storage Tank** (designated as TNK-2)
Unit Description: One 12,000 gallon underground gasoline storage tank.
- II.A.9 Diesel Tanks** (designated as TNK-3)
Unit Description: Two 560 gallon diesel storage tanks. No unit-specific applicable requirements.
- II.A.10 Triethylene Glycol Tanks** (designated as TNK-4)
Unit Description: One 8,820 gallon and one 6,300 gallon triethylene glycol storage tanks. No unit-specific applicable requirements.
- II.A.11 Ambitrol Tanks** (designated as TNK-5)
Unit Description: Two 3,178 gallon ethylene glycol storage tanks. No unit-specific applicable requirements.
- II.A.12 Methanol/Corrosion Inhibitor Tank** (designated as TNK-6)
Unit Description: One 3,959 gallon methanol/corrosion inhibitor storage tank. No unit-specific applicable requirements.
- II.A.13 Waste Water Tank** (designated as TNK-7)
Unit Description: One 11,382 gallon and one 500 gallon waste water storage tanks.
- II.A.14 Waste Oil Tank 1** (designated as TNK-8)
Unit Description: One 16,800 gallon waste oil storage tank.
- II.A.15 Waste Oil Tank 2** (designated as TNK-9)
Unit Description: One 2,500 gallon waste oil storage tank. No unit-specific applicable requirements.

- II.A.16 **Oil Tanks** (designated as TNK-10)
Unit Description: One 2,500 gallon and one 5,000 gallon oil storage tanks. No unit-specific applicable requirements.
- II.A.17 **Lube Oil Tank** (designated as TNK-11)
Unit Description: One 2,085 gallon lube oil storage tank. No unit-specific applicable requirements.
- II.A.18 **Methanol Tank** (designated as TNK-12)
Unit Description: One 500 gallon methanol storage tank. No unit-specific applicable requirements.
- II.A.19 **Venting of Natural Gas** (designated as MISC-1)
Unit Description: One vent for methane and ethane. No unit-specific applicable requirements.
- II.A.20 **Elastec Smart Ash Industrial Refuse Combustor** (designated as MISC-2)
Unit Description: One portable unit used for disposal of non-hazardous materials. No unit-specific applicable requirements.
- II.A.21 **Clay Basin Dew Point (CBDP) Process Unit** (designated as CBDP-0)
Unit Description: This unit receives and processes natural gas from a storage reservoir and from the main lines. The CBDP process unit includes emission units identified as CBDP-1 through 4.
- II.A.22 **Hot Oil Heater**(designated as CBDP-1)
Unit Description: One pipeline quality natural gas-fired heater rated at 3.0 MMBtu/hr. No unit-specific applicable requirements.
- II.A.23 **Liquid Hydrocarbon Loading Rack** (designated as CBDP-2)
Unit Description: One liquid hydrocarbon loading rack controlled using a vapor recovery system. No unit-specific applicable requirements.
- II.A.24 **Ethylene Glycol Regenerator** (designated as CBDP-3)
Unit Description: One rich/lean exchanger, one flash tank, and one still. No unit-specific applicable requirements.
- II.A.25 **Miscellaneous Process Stream Equipment** (designated as CBDP-4)
Unit Description: Various miscellaneous process stream equipment including pumps, compressors, pressure relief devices, open-ended valves and lines, valves, flanges and other connectors, etc. No unit-specific applicable requirements.

II.B. **Requirements and limitations.**

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

II.B.1 **Conditions on permitted source (Source-wide)**

II.B.1.a **Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under R307-401-5 and 40 CFR 60.11(d); condition originated in DAQE-089-02]

II.B.1.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.1.a.2

Recordkeeping:

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.b

Condition:

Visible emissions shall be no greater than 10 percent opacity from emission units ICE-1 through 4, EC-1 and 2, and CBDP-1. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-089-02]

II.B.1.b.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.1.b.2

Recordkeeping:

In lieu of monitoring via visible emission observations, the permittee shall keep one of the following sets of records for each affected emission unit, as applicable:

- (1) Documentation that the emission unit can only burn pipeline quality natural gas;
- (2) Documentation that the fuels other than pipeline quality natural gas cannot be supplied to the emission unit without modification of the fuel supply system; or
- (3) Fuel bills or fuel meter readings that demonstrate only pipeline quality natural gas are combusted in the emission unit.

The permittee shall keep a log which includes the location and description of each affected emission unit. For each affected emission unit the log shall include the type of records that will be used in lieu of monitoring via visible emission observations. If fuel bills or fuel meter readings will be used in lieu of monitoring via visible emission observations, the permittee shall review fuel bills or fuel meter readings once per quarter and record in the log the types of fuel combusted. The records and log required by this condition shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.b.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2

Conditions on Turbines for Gas Compression (ICE-1)

II.B.2.a

Condition:

Sulfur content of any natural gas burned shall be no greater than 0.8 % by weight. [Authority granted under 40 CFR 60 (Subpart GG); condition originated in DAQE-089-02]

- II.B.2.a.1 **Monitoring:**
The Federal Energy Regulator Commission (FERC) gas tariff serves as the monitoring.
- II.B.2.a.2 **Recordkeeping:**
The total sulfur limit in the FERC gas tariff shall be recorded and converted to percent sulfur by weight to determine the sulfur content.
- II.B.2.a.3 **Reporting:**
There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.2.b **Condition:**
Combined hours of operation shall be no greater than 24,120 hours per rolling 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-089-02]
- II.B.2.b.1 **Monitoring:**
An hour meter shall be used to continuously monitor the hours of operation for the affected equipment. Readings shall be taken monthly to determine the total operating hours for that month. Compliance with the limitation shall be determined on a rolling 12-month total. Each month, a new 12-month total shall be calculated using data from the previous 12 months.
- II.B.2.b.2 **Recordkeeping:**
Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.
- II.B.2.b.3 **Reporting:**
There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.2.c **Condition:**
Emissions of NO_x shall be no greater than 7.43 lb/hr and 0.0042% by volume (15% O₂, dry) for each turbine. [Authority granted under R307-401-6(1) [BACT] and 40 CFR 60 Subpart GG; condition originated in DAQE-089-02]
- II.B.2.c.1 **Monitoring:**
Stack testing shall be performed as specified here:
- (a) Frequency. Each unit shall be tested annually, based on the date of the most recent stack test.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Sample Point The emission sample point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.

(d) Methods

(1) 40 CFR 60, Appendix A, Method 20 shall be used to determine the nitrogen oxides and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen;

(2) 40 CFR 60, Appendix A, Method 19 shall be used to determine the volumetric flow rate based on the fuel flow determined by fuel gas meter and exhaust O₂ concentration.

(3) Fuel-bound nitrogen content shall be assumed to be 0 wt%, in accordance with EPA guidance document EMTIC GD-009 dated 3/12/90;

(e) Calculations. The nitrogen oxides emission rate (NO_x) shall be computed for each run using the following equation:

$$NO_x = (NO_{xo}) (P_r/P_o)^{0.5} e^{19(H_o - 0.00633)} (288^\circ K/T_a)^{1.53} \quad \text{where:}$$

NO_x = emission rate of NO_x at 15% O₂ and ISO standard ambient conditions, volume percent.

NO_{xo} = observed NO_x concentration, ppm by volume.

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

P_o = observed combustor inlet absolute pressure at test, mm Hg.

H_o = observed humidity of ambient air, g H₂O/g air.

e = transcendental constant, 2.718.

T_a = ambient temperature, °K.

To determine mass emission rates (lb/hr, etc.), the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(f) Production Rate During Testing. The operational rate during all compliance testing shall be no less than 90% of the maximum rate achieved in the previous three (3) years

II.B.2.c.2

Recordkeeping:

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.c.3

Reporting:

Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.2.d

Condition:

Emissions of CO shall be no greater than 5.38 lb/hr and 50 ppm_{dv} (15% O₂, dry) for each turbine. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-089-02]

II.B.2.d.1

Monitoring:

Stack testing shall be performed as specified here:

(a) Frequency. Each unit shall be tested every year.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) The emission sample point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.

(d) Methods to be used:

(1) To determine stack volumetric flow rate - 40 CFR 60, Method 19 based on the fuel flow determined by fuel gas meter and exhaust O₂ concentration.

(2) To test for CO emissions - 40 CFR 60, Appendix A, Method 10, 10A, or 10B.

(e) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors to give the results in the specified units of the emission limitation.

(f) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.2.d.2

Recordkeeping:

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.d.3

Reporting:

Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.3 **Conditions on Turbines for Backup Power (ICE-2)**

II.B.3.a **Condition:**

Combined hours of operation shall be no greater than 400 hours per rolling 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-089-02]

II.B.3.a.1 **Monitoring:**

An hour meter shall be used to continuously monitor the hours of operation for the affected equipment. Readings shall be taken monthly to determine the total operating hours for that month. Compliance with the limitation shall be determined on a rolling 12-month total. Each month, a new 12-month total shall be calculated using data from the previous 12 months.

II.B.3.a.2 **Recordkeeping:**

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.3.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3.b **Condition:**

Emissions of NO_x shall be no greater than 3.8 lb/hr and 76.4 ppmdv (15% O₂, dry) for each generator. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-089-02]

II.B.3.b.1 **Monitoring:**

Stack testing shall be performed as specified here:

(a) Frequency. Each unit shall be tested after 1,000 hours of operation or at least every five years.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) The emission sample point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1.

(d) Methods to be used:

(1) To determine stack volumetric flow rate - 40 CFR 60, Method 19 based on the fuel flow determined by fuel gas meter and exhaust O₂ concentration.

(2) To test for NO_x emissions - 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E.

(e) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors to give the results in the specified units of the emission limitation.

(f) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years. (R307-1-3.4.3)

II.B.3.b.2

Recordkeeping:

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.3.b.3

Reporting:

Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.4

Conditions on Internal Combustion Engine - Controlled (ICE-4)

II.B.4.a

Condition:

If a continuous program of construction, installation, modification, relocation or establishment is not proceeding eighteen months after the issuance date of the subject approval order, the Executive Secretary may revoke the subject approval order. [Authority granted under R307-401-11; condition originated in DAQE-089-02]

II.B.4.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.4.a.2

Recordkeeping:

If applicable, the permittee shall maintain a copy of the notification required by this permit condition in accordance with Provision I.S.1 of this permit.

II.B.4.a.3

Reporting:

In addition to the reporting requirements specified in Section I of this permit, the permittee shall notify the Executive Secretary in writing eighteen months after the issuance date of the subject approval order if construction, installation, modification, relocation or establishment is not complete. The notification shall document the status of construction, installation, modification, relocation or establishment and provide a schedule for installation, modification, relocation or establishment. The permittee shall also notify the Executive Secretary in writing when the affected process unit is operational.

II.B.4.b

Condition:

Emissions of NO_x shall be no greater than 3.7 lb/hr. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-089-02]

II.B.4.b.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Testing Frequency

(1) Initial compliance testing is required. The initial test shall be performed as soon as possible and in no case later than 180 days after the initial start up of the affected emission unit.

(2) Test every five years using 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E or every two years with a portable testing monitor. If portable testing monitor is to be used, a correlation must be established during the initial test between the portable testing monitor and Method 7, 7A, 7B, 7C, 7D or 7E.

(b) Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

(d) Methods

(1) Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location

(2) Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or 40 CFR 60, Appendix A, Method 19 based on the fuel flow determined by fuel gas meter and exhaust gas O₂ concentration.

(3) Oxides of Nitrogen (NO_x)

40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D or 7E must be used for the initial test. After performing the initial test, a portable NO_x monitor may be used in lieu of Method 7, 7A, 7B, 7C, 7D or 7E provided the requirements of (a.2) are met. If the requirements of (a.2) are not met, Method 7, 7A, 7B, 7C, 7D or 7E must be used for subsequent tests.

(e) Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

(f) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.4.b.2

Recordkeeping:

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.4.b.3

Reporting:

Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.4.c

Condition:

Emissions of CO shall be no greater than 3.7 lb/hr. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-089-02]

II.B.4.c.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Testing Frequency

(1) Initial compliance testing is required. The initial test shall be performed as soon as possible and in no case later than 180 days after the initial start up of the affected emission unit.

(2) Test every five years using 40 CFR 60, Appendix A, Method 10 or every two years with a portable testing monitor. If portable testing monitor is to be used, a correlation must be established during the initial test between the portable testing monitor and Method 10.

(b) Notification

The Executive Secretary shall be notified at least 30 days prior to conducting any required emission testing. A source test protocol shall be submitted to DAQ when the testing notification is submitted to the Executive Secretary.

(d) Methods

(1) Sample Location

The emission point shall be designed to conform to the requirements of 40 CFR 60, Appendix A, Method 1, or other methods as approved by the Executive Secretary. An Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location

(2) Volumetric Flow Rate

40 CFR 60, Appendix A, Method 2 or 40 CFR 60, Appendix A, Method 19 based on the fuel flow determined by fuel gas meter and exhaust gas O₂ concentration.

(3) Carbon Monoxide (CO)

40 CFR 60, Appendix A, Method 10 must be used for the initial test. After performing the initial test, a portable CO monitor may be used in lieu of Method 10 provided the requirements of (a.2) are met. If the requirements of (a.2) are not met, Method 10 must be used for subsequent tests.

(e) Calculations

To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary, to give the results in the specified units of the emission limitation.

(f) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

II.B.4.c.2

Recordkeeping:

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.4.c.3

Reporting:

Results of required stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. The submittal shall clearly identify results and indicate compliance status. The annual compliance certification required by Provision L in Section I of this permit shall use the most recent test results as a basis for stating compliance status for this limitation.

II.B.4.d

Condition:

For each compressor, the permittee shall comply with the requirements of 40 CFR 60.482-3, as soon as practicable, but no later than 180 days after initial startup of the affected process unit, or demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service. [Authority granted under 40 CFR 60.632(a) and (f); condition originated in 40 CFR 60 Subpart KKK]

II.B.4.d.1

Monitoring:

For each compressor, the permittee shall:

- a. demonstrate compliance with the requirements of 40 CFR 60.482-3 within 180 days of initial startup of the affected process unit and comply with the monitoring requirements of 40 CFR 60.482-3 after the initial compliance demonstration; or
- b. demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f)

Compliance with 40 CFR 60.482-3 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c).

II.B.4.d.2

Recordkeeping:

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), (h) and (k). For compressors, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j), 40 CFR 60.635(c) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.4.d.3

Reporting:

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - c), and (e). For compressors, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.5

Conditions on Underground Gasoline Storage Tank (TNK-2)

II.B.5.a

Condition:

The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. [Authority granted under 40 CFR 60.112b(b); condition originated in DAQE-089-02]

II.B.5.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.5.a.2

Recordkeeping:

A copy of the required records shall be maintained and made available to the Executive Secretary upon request.

II.B.5.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.6

Conditions on Waste Water Tank (TNK-7)

II.B.6.a

Condition:

The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. [Authority granted under 40 CFR 60.112b(b); condition originated in DAQE-089-02] **Reviewer comment: This condition applies to the 11,382 gallon tank only.**

II.B.6.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.6.a.2

Recordkeeping:

A copy of the required records shall be maintained and made available to the Executive Secretary upon request.

II.B.6.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.7

Conditions on Waste Oil Tank 1 (TNK-8)

II.B.7.a

Condition:

The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. [Authority granted under 40 CFR 60.112b(b); condition originated in DAQE-089-02]

II.B.7.a.1

Monitoring:

Records required for this permit condition will serve as monitoring.

II.B.7.a.2

Recordkeeping:

A copy of the required records shall be maintained and made available to the Executive Secretary upon request.

II.B.7.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.8

Conditions on Clay Basin Dew Point (CBDP) Process Unit (CBDP-0)

II.B.8.a

Condition:

For each pump in light liquid service, the permittee shall comply with the requirements of 40 CFR 60.482-2 or demonstrate that the pump is neither in VOC service nor in wet gas service. [Authority granted under 40 CFR 60.632(a) and (f); condition originated in DAQE-089-02]

II.B.8.a.1

Monitoring:

For each pump in light liquid service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-2; or
- b. demonstrate that the pump is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f)

Compliance with 40 CFR 60.482-2 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c). The permittee shall demonstrate that a pump is in light liquid service in accordance with 40 CFR 60.485(e) or 40 CFR 60.633(h)(2).

II.B.8.a.2

Recordkeeping:

For pumps in light liquid service, except those pumps where it is demonstrated that the pump is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), (h) and (k). For pumps in light liquid service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.8.a.3

Reporting:

For pumps in light liquid service, except those pumps where it is demonstrated that the pump is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - c) and (e). For pumps in light liquid service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.8.b

Condition:

For each compressor, the permittee shall comply with the requirements of 40 CFR 60.482-3 or demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service. [Authority granted under 40 CFR 60.632(a) and (f); condition originated in DAQE-089-02]

II.B.8.b.1

Monitoring:

For each compressor, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-3; or
- b. demonstrate that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f)

Compliance with 40 CFR 60.482-3 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c).

II.B.8.b.2

Recordkeeping:

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), (h) and (k). For compressors, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j), 40 CFR 60.635(c) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.8.b.3

Reporting:

For compressors, except those compressors where it is demonstrated that the compressor is neither in VOC service nor in wet gas service or is a reciprocating compressor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - c), and (e). For compressors, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.8.c

Condition:

For each pressure relief device in gas/vapor service, the permittee shall comply with the requirements of 40 CFR 60.482-4 or 40 CFR 60.633(b) or demonstrate that the pressure relief device is neither in VOC service nor in wet gas service. [Authority granted under 40 CFR 60.632(a) and (f); condition originated in DAQE-089-02]

II.B.8.c.1

Monitoring:

For each pressure relief device in gas/vapor service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-4 or 40 CFR 60.633(b); or
- b. demonstrate that the pressure relief device is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f).

Compliance with 40 CFR 60.482-4 and 40 CFR 60.633(b) will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c).

II.B.8.c.2

Recordkeeping:

For pressure relief devices in gas/vapor service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a), (e) and (k), and 40 CFR 60.635(b). For pressure relief devices in gas/vapor service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.8.c.3

Reporting:

For pressure relief devices in gas/vapor service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c) and (e), and 40 CFR 60.636(b) and (c). For pressure relief devices in gas/vapor service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.8.d

Condition:

For each open-ended valve and line, the permittee shall comply with the requirements of 40 CFR 60.482-6 or demonstrate that the open-ended valve or line is neither in VOC service nor in wet gas service. [Authority granted under 40 CFR 60.632(a) and (f); condition originated in DAQE-089-02]

II.B.8.d.1

Monitoring:

For each open-ended valve and line, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-6; or
- b. demonstrate that the open-ended valve or line is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f)

Compliance with 40 CFR 60.482-6 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a).

II.B.8.d.2

Recordkeeping:

For open-ended valves and lines, except those open-ended valves and lines where it is demonstrated that the open-ended valve or line is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a), (e) and (k). For open-ended valves and lines, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.8.d.3

Reporting:

For open-ended valves and lines, except those open-ended valves and lines where it is demonstrated that the open-ended valve or line is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c), and (e). For open-ended valves and lines, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.8.e

Condition:

For each valve in gas/vapor service or light liquid service, the permittee shall comply with the requirements of 40 CFR 60.482-7 or demonstrate that the valve is neither in VOC service nor in wet gas service. [Authority granted under 40 CFR 60.632(a) and (f); condition originated in DAQE-089-02]

II.B.8.e.1

Monitoring:

For each valve in gas/vapor service or light liquid service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-7; or
- b. demonstrate that the valve is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f)

Compliance with 40 CFR 60.482-7 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a - c). The permittee shall demonstrate that a valve is in light liquid service in accordance with 40 CFR 60.485(e) or 40 CFR 60.633(h)(2).

II.B.8.e.2

Recordkeeping:

For valves in gas/vapor service or light liquid service, except those valves where it is demonstrated that the valve is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e - g), and (k). For valves in gas/vapor service or light liquid service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.8.e.3

Reporting:

For valves in gas/vapor service or light liquid service, except those valves where it is demonstrated that the valve is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a - e). For valves in gas/vapor service or light liquid service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.8.f

Condition:

For each pressure relief device in light liquid service, the permittee shall comply with the requirements of 40 CFR 60.482-8 or demonstrate that the pressure relief device is neither in VOC service nor in wet gas service. [Authority granted under 40 CFR 60.632(a) and (f); condition originated in DAQE-089-02]

II.B.8.f.1

Monitoring:

For each pressure relief device in light liquid service, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-8; or
- b. demonstrate that the pressure relief device is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f)

Compliance with 40 CFR 60.482-8 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a, b). The permittee shall demonstrate that a pressure relief device is in light liquid service in accordance with 40 CFR 60.485(e) or 40 CFR 60.633(h)(2).

II.B.8.f.2

Recordkeeping:

For pressure relief devices in light liquid service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), and (k). For pressure relief devices in light liquid service, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.8.f.3

Reporting:

For pressure relief devices in light liquid service, except those pressure relief devices where it is demonstrated that the pressure relief device is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c), and (e). For pressure relief devices in light liquid service, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.8.g

Condition:

For each flange and other connector, the permittee shall comply with the requirements of 40 CFR 60.482-8 or demonstrate that the flange or other connector is neither in VOC service nor in wet gas service. [Authority granted under 40 CFR 60.632(a) and (f); condition originated in DAQE-089-02]

II.B.8.g.1

Monitoring:

For each flange and other connector, the permittee shall:

- a. comply with the monitoring requirements of 40 CFR 60.482-8; or
- b. demonstrate that the flange or other connector is neither in VOC service nor in wet gas service using the test methods and procedures in 40 CFR 60.485(a), (d), and (f) except as modified by 40 CFR 60.632(f)

Compliance with 40 CFR 60.482-8 will be determined by review of records and reports, review of performance test results and inspection using the methods and procedures specified in 40 CFR 60.485(a, b).

II.B.8.g.2

Recordkeeping:

For flanges and other connectors, except those flanges and other connectors where it is demonstrated that the flange or other connector is neither in VOC service nor in wet gas service, the permittee shall comply with the recordkeeping requirements of 40 CFR 60.486(a - c), (e), and (k). For flanges and other connectors, the permittee shall also comply with the recordkeeping requirements of 40 CFR 60.486(j) and any additional recordkeeping requirements in Section I.S.1 of this permit.

II.B.8.g.3

Reporting:

For flanges and other connectors, except those flanges and other connectors where it is demonstrated that the flange or other connector is neither in VOC service nor in wet gas service, the permittee shall comply with the reporting requirements of 40 CFR 60.487(a), (c), and (e). For flanges and other connectors, the permittee shall also comply with the reporting provisions contained in Section I of this permit.

II.B.8.h

Condition:

The permittee shall comply with all applicable requirements of 40 CFR 60 Subpart A. [Authority granted under 40 CFR 60 (Subpart A); condition originated in DAQE-089-02]

II.B.8.h.1

Monitoring:

The permittee shall comply with the monitoring requirements of 40 CFR 60.8(a), (b), (c), (e) and (f), 60.11(a), and 60.13(b), (f), and (i).

II.B.8.h.2

Recordkeeping:

The permittee shall comply the recordkeeping requirements of provision I.S.1 of this permit and any additional recordkeeping requirements of 40 CFR 60.7(f).

II.B.8.h.3

Reporting:

The permittee shall comply with the reporting requirements in Section I of this permit and the reporting and notification requirements of 40 CFR 60.4, 60.6(b), 60.7(a) and (c), 60.8(a), 60.13(i), 60.15(d), and 60.19. The requirements of 40CFR 60.8(d) do not apply to the affected process unit except that the permittee must notify the Executive Secretary of the schedule for the initial performance tests at least 30 days before the initial performance tests.

II.C. **Emissions Trading.**

(R307-415-6a(10))

Not applicable to this source.

II.D. **Alternative Operating Scenarios.**

(R307-415-6a(9))

Not applicable to this source.

Section III: PERMIT SHIELD

The following requirements have been determined to be not applicable to this source in accordance with Provision I.M, Permit Shield:

III.A. **40 CFR Part 60, Subpart GG (Standards of Performance for Stationary Gas Turbines)**

This regulation is not applicable to the Turbines for Backup Power (ICE-2) because these gas turbines are used only for emergency power (NSPS 60.332(g))

III.B. **40 CFR 63 Subpart B (Requirements for Control Technology Determinations for Major Sources)**

This regulation is not applicable to the permitted source (Source-wide) because this source is not a major source of hazardous air pollutants

III.C. **40 CFR 63 Subpart H (National Emission Standards for Organic HAPs for Equipment Leaks)**

This regulation is not applicable to the permitted source (Source-wide) because this source has no equipment in organic hazardous air pollutants (OHAP) service

III.D. **40 CFR 63 Subpart R (National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations))**

This regulation is not applicable to the permitted source (Source-wide) because this source is not a major source of hazardous air pollutants (63.420(b)(2))

III.E. **40 CFR, Part 68 (Chemical Accident Prevention Provisions)**

This regulation is not applicable to the permitted source (Source-wide) because this source is regulated under 49 CFR Parts 192, 193 or 195 and does not meet the definition of stationary source for this part

Section IV: ACID RAIN PROVISIONS.

This source is not subject to Title IV. This section is not applicable.

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-089-02

dated February 04, 2002

1. Comment on an item originating in 40 CFR 60 Subpart GG regarding Turbines for Gas Compression (Unit ICE-1)

Subpart GG NO_x standard and NO_x limit in AO: NO_x standard in Subpart GG is:

$$\text{STD} = 0.0075 (14.4)/Y + F$$

where

STD=allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis

Y =manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F =NO_x emission allowance for fuel-bound nitrogen.

EPA guideline document EMTIC, GD-009 advises to use zero for the value of F for gas turbines. So, the lowest NO_x limit is 0.0075 percent by volume when Y=14.4. NO_x limit in AO is 42 ppmv or 0.0042 percent by volume which is more stringent than the Subpart GG standard. Therefore, NSPS standard is subsumed in the AO limit. In order to use equation in 40 CFR Part 60.335(c)(1) to compute the NO_x emissions, NO_x limit is expressed in the unit of percent by volume in this permit. [Comment last updated on 2/05/2002]

2. Comment on an item originating in 40 CFR 60 Subpart GG regarding Turbines for Gas Compression (Unit ICE-1)

Subpart GG requirement for monitoring fuel-bound nitrogen content of turbine fuel: Subpart GG requires the monitoring of the fuel-bound nitrogen. The pipeline quality natural gas usually has no fuel-bound nitrogen. EPA guideline document, EMTIC GD-009 indicates that there is no good test method to distinguish between fuel-bound nitrogen and other forms of nitrogen such as dissolved air, in fuels used in gas turbines. A Memorandum from EPA Headquarters dated August 14, 1987 regarding Authority for Approval of Custom Fuel Monitoring Schedules Under NSPS Subpart GG states that nitrogen monitoring can be waived for pipeline quality gas since there is no fuel-bound nitrogen and since free nitrogen does not contribute appreciably to NO_x emissions. Therefore, Subpart GG requirement for fuel-bound nitrogen content monitoring is not incorporated into the permit. [Comment last updated on 5/28/1998]

3. Comment on an item originating in 40 CFR 60 Subpart GG regarding Turbines for Gas Compression (Unit ICE-1)

Subpart GG Standard for SO₂: 40 CFR Subpart GG, 60.333 requires either emission limit of no greater than 0.015 percent by volume (15% oxygen on a dry basis) or sulfur content of no greater than 0.8 percent by weight in the fuel. The source chooses to comply with the sulfur content limit in the fuel. According to the letter from Questar dated May 7, 1998 regarding Kastler Station Operating Permit Review Questions, Questar's gas transportation tariff requires that total sulfur content in pipeline gas be limited to 0.002% by weight. [Comment last updated on 5/28/1998]

4. Comment on an item originating in 40 CFR 60 Subpart GG regarding Turbines for Gas Compression (Unit ICE-1)

Subpart GG Requirement for Monitoring Sulfur Content: The permittee's gas transportation tariff requires that the total sulfur content in the pipeline gas be limited to no greater than 5 grains of total sulfur per Mcf which is equivalent to 0.002 % by weight. This is significantly (400 times) lower than the permit limit of 0.8 % by weight. Compliance with the tariff is deemed to meet the permit requirement. Questar Pipeline Company's Federal Energy Regulator Commission (FERC) Gas Tariff functions as a procedure manual that set out the manner in which Questar is required to provide these services to its customers. The tariff is effective indefinitely. Therefore, recording of the tariff can serve as monitoring for the sulfur content. [Comment last updated on 6/24/1998]

5. Comment on an item originating in 40 CFR 60 Subpart GG regarding Turbines for Gas Compression (Unit ICE-1)

Subpart GG requirements related to water injection and emergency fuel: Turbines have low NO_x burners to control NO_x emissions and there is no water injection. Also, this source does not use an emergency fuel. Therefore, the associated requirements with water injection and emergency fuel in Subpart GG do not apply to the turbines. [Comment last updated on 2/05/2002]

6. Comment on an item originating in 40 CFR 60 (Subpart A) regarding permitted source (Source-wide)

Operation and maintenance requirements: 40 CFR 60.11(d) provides operation and maintenance (O & M) requirements for equipment subject to an NSPS standard. These requirements apply to the three compressor turbines and the Clay Basin Dew Point Plant. The three tanks subject to 40 CFR 60 Subpart Kb are exempt from the O & M requirements of 40 CFR 60.11(d) as specified in 40 CFR 60.110b(b). However, these tanks are subject to O & M requirements in approval order DAQE-089-02. The O & M requirements of 40 CFR 60.11(d) are identical to those in DAQE-089-02. [Comment last updated on 2/05/2002]